## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPELLANTS:	Andrew Varga, et al.	)
SERIAL NUMBER:	09/847,557	)  Defore the Board  of Appeals
FILED:	May 2, 2001	) ) Appeal No. )
FOR:	METHOD AND SYSTEM FOR MANAGING PARTS REQUIREMENTS PROCESSES	) ) ) )

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

## APPEAL BRIEF

## **REAL PARTY IN INTEREST**

The real party in interest is International Business Machines Corporation, Inc., the assignee of recorded dated 05/02/2001, reel /frame 011789/0059.

#### RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

## STATUS OF CLAIMS

Claims 10, 16, 20, 22, 28, and 32 have been cancelled.

Claims 1-9, 11-15, 17-19, 21, 23-27, 29-31, and 33-35 stand rejected.

The rejections of claims 1-9, 11-15, 17-19, 21, 23-27, 29-31, and 33-35 are herein appealed.

#### STATUS OF AMENDMENTS

Appellants' Amendment of February 22, 2007 was entered. No subsequent Amendments have been introduced.

#### SUMMARY OF CLAIMED SUBJECT MATTER

A concise explanation of the subject matter defined in each of the independent claims 1, 34 and 35 involved in the appeal is provided below:

## Claim 1

Claim 1 recites "[a] system for managing parts requirements processes in an engineering environment" (FIG. 1; page 5, line 18 – page 9, line 13). The system comprises a server 102 (FIG. 1) in communication with a workstation 106 over a network 104, the workstation executing a design tool application for developing a product design. The system further includes a bill of material assist application (page 6, line 18- page 7, line 2) executing on at least one of the server 102 (FIG. 1) and the workstation 106 for managing the parts requirements processes. The bill of material assist application receives a bill of material including a list of component parts in response to the product design conducted on the workstation (FIG. 2A, blocks 202, 204 and 206; page 9, line 14-page 10, line 12; FIG. 3, tabs 304 and 306), wherein the bill of material for the product design can be edited to facilitate production planning processes for at least one of

developing or manufacturing the product design (FIG. 2A, block 210; page 14, lines 1-9). Each component part in the list is mapped to corresponding part selection process information (FIG. 2A, blocks 212 and 214; page 14, lines 6-19), the corresponding part selection process information acquired from a plurality of external sources. A summary resulting from the mapping is generated (FIG. 4, screen 400; page 14, lines 11-19). For each of the component parts in the list, the corresponding part selection process information includes at least one of: a lead time; a current supply status; at least one supply source; a cost; an end-of-life data; and a preferredness rating (page 14, line 14 – page 16, line 2; FIG. 4, screen 400).

#### Claim 34

Claim 34 recites "[a] method for managing parts requirements processes in an engineering environment" (FIG. 1; page 5, line 18 – page 9, line 13). The method includes receiving a bill of material including a list of component parts in response to the product design conducted on the workstation (FIG. 2A, blocks 202, 204 and 206; page 9, line 14- page 10, line 12; FIG. 3, tabs 304 and 306), wherein the bill of material for the product design can be edited to facilitate production planning processes for at least one of developing or manufacturing the product design (FIG. 2A, block 210; page 14, lines 1-9). Each component part in the list is mapped to corresponding part selection process information (FIG. 2A, blocks 212 and 214; page 14, lines 6-19), the corresponding part selection process information acquired from a plurality of external sources. A summary resulting from the mapping is generated (FIG. 4, screen 400; page 14, lines 11-19). For each of the component parts in the list, the corresponding part selection process

information includes at least one of: a lead time; a current supply status; at least one supply source; a cost; an end-of-life data; and a preferredness rating (page 14, line 14 – page 16, line 2; FIG. 4, screen 400).

#### Claim 35

Claim 35 recites "[a] storage medium encoded with machine-readable program code for managing parts requirements processes in an engineering environment" (FIG. 1, server 102 or workstation 106; page 5, line 18 - page 9, line 13), the program code including instructions for causing a computer to implement a method. The method includes receiving a bill of material including a list of component parts in response to the product design conducted on the workstation (FIG. 2A, blocks 202, 204 and 206; page 9, line 14-page 10, line 12; FIG. 3, tabs 304 and 306), wherein the bill of material for the product design can be edited to facilitate production planning processes for at least one of developing or manufacturing the product design (FIG. 2A, block 210; page 14, lines 1-9). Each component part in the list is mapped to corresponding part selection process information (FIG. 2A, blocks 212 and 214; page 14, lines 6-19), the corresponding part selection process information acquired from a plurality of external sources. A summary resulting from the mapping is generated (FIG. 4, screen 400; page 14, lines 11-19). For each of the component parts in the list, the corresponding part selection process information includes at least one of: a lead time; a current supply status; at least one supply source; a cost; an end-of-life data; and a preferredness rating (page 14, line 14 – page 16, line 2; FIG. 4, screen 400).

#### GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-9, 11-15, 17-19, 21, 23-27, 29-31, and 33-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Swanson (U.S. Patent Publication No. 2002/0184111) alone.

#### ARGUMENT

## Claims 1-9, 11-15, 17-19, 21, 23-27, 29-31, and 33-35 are patentable over Swanson

Claims 1-9, 11-15, 17-19, 21, 23-27, 29-31, and 33-35 have been rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Swanson (U.S. Patent Publication No. 2002/0184111) alone.

The Appellants submit that the rejection of claims 1-9, 11-15, 17-19, 21, 23-27, 29-31, and 33-35 is in error because the Examiner has not met the burden of establishing a prima facie case of obviousness, thus contravening the provisions of 35 USC §103(a).

The Appellants submit that there is clear error in the outstanding rejection under 35 USC §103(a) because the cited reference does not teach or suggest all of the claim limitations. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

With respect to independent claims 1, 34, and 35, the Examiner states on page 3 of the final Office Action of May 14, 2007, that "[t]he system of Swanson differs from the claimed invention in that the bill of material is not explicitly shown to be edited to facilitate production planning processes. However, there are a variety of well-known

reasons for editing a bill of material, such as cost planning, inventory management, supplier status, managerial approval, etc., and the particular reason would be a matter of design choice. It would have been obvious to one of ordinary skill in the art at the time the invention was made to edit the bill of materials to facilitate a variety of planning processes, including production planning".

The Examiner correctly observed that Swanson fails to disclose editing an engineering drawing or bill of material to facilitate development and manufacture of a product design. In fact, Swanson's e-catalog is employed by users for the purpose of making product decisions, and not for the purpose of developing or manufacturing a product design. Paragraph [0003] of Swanson explicitly states, "[t]o be eCommerceready starts with building an intelligent content and information architecture for supplier's product information--an Internet-ready and transaction-ready intelligent multimedia product catalog. Today most companies have deployed simple catalogs on their Web sites in graphical form incorporating HTML and PDF formats....Computer accessible intelligent product catalogs are the fuel of eCommerce, without them products can't be selected, transactions can't be completed, B2B exchanges are stalled". Moreover, paragraph [0008] of Swanson explicitly states "[c]ompanies are discovering that the existing catalogs on their web site are obsolete and insufficient for eCommerce. While existing catalogs will support human viewing they are not structure to assist software programs in completing transactions."

The teachings of Swanson are directed to improved techniques for selling available products to customers through an online catalog posted on an eCommerce website. In the context of eCommerce websites, customers are not responsible for

designing the products they are purchasing. Moreover, customers are not charged with the responsibility of selecting specific vendors for each of the individual components that make up an item or finished product to be purchased. A customer purchasing a product from a seller using an eCommerce website will not even be aware of the sources from which the individual component parts of the product were obtained. Instead, the seller is responsible for designing products which are on offer and listed in the online catalog.

By contrast, Appellants' claimed systems, methods, and computer program products are applicable to a vendor designing and developing products before they are offered for sale in an online catalog. Refer, for example, to independent claims 1, 34, and 35 which state "receiving a bill of material including a list of component parts in response to a product design conducted on a workstation, wherein the bill of material for the product design can be edited to facilitate production planning processes for at least one of developing or manufacturing the product design". Since Swanson is directed to selling available products to customers who are not responsible for designing the products they are purchasing, it would be counter-intuitive (and, hence, nonobvious) for Swanson to be modified so as to provide customers with the capability of changing a bill of materials listing component parts for constructing or designing a product they wish to purchase.

In view of the foregoing considerations, Swanson fails to teach, suggest, or render obvious at least the elements "a server in communication with a workstation over a network, the workstation executing a design tool application for developing a product design", and "receiving a bill of material...in response to the product design conducted on the workstation, wherein the bill of material for the product design can be edited to

facilitate production planning processes for at least one of developing or manufacturing the product design" as recited in claim 1. Moreover, Swanson fails to teach, suggest, or render obvious at least the element "receiving a bill of material...in response to a product design conducted on a workstation, wherein the bill of material for the product design can be edited to facilitate production planning processes for at least one of developing or manufacturing the product design" as recited in claims 34 and 35.

Dependent claims 2-9, 11-15, 17-19, 21, 23-27, 29-31 and 33 were rejected under 35 USC §103(a) as being unpatentable over Swanson alone. Appellants submit that claims 2-9 are allowable at least because they depend from claim 1 which is believed to be an allowable claim for the reasons described above. Appellants further submit that claims 11-15,17-19 and 21 are allowable at least because they depend from claim 34 which is believed to be an allowable claim for the reasons described above. Moreover, Appellants further submit that claims 23-27, 29-31 and 33 are allowable at least because they depend from claim 35 which is believed to be an allowable claim for the reasons described above.

## **CONCLUSION**

In view of the foregoing, it is urged that the final rejection of claims 1-9, 11-15, 17-19, 21, 23-27, 29-31, and 33-35 be overturned. The final rejection is in error and should be reversed.

The fee as set forth in 37 CFR § 41.20(b)(2) is enclosed herewith.

If there are any charges with respect to this Appeal Brief or otherwise, please charge them to Deposit Account No. 50-0510 maintained by Applicants' attorneys.

Respectfully submitted,

Ayala et al.

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## **CLAIM APPENDIX**

1. A system for managing parts requirements processes in an engineering environment, comprising:

a server in communication with a workstation over a network, the workstation executing a design tool application for developing a product design;

a bill of material assist application executing on at least one of the server and the workstation for managing said parts requirements processes, the bill of material assist application performing:

receiving a bill of material including a list of component parts in response to the product design conducted on the workstation, wherein the bill of material for the product design can be edited to facilitate production planning processes for at least one of developing or manufacturing the product design;

mapping each component part in the list to corresponding part selection process information, the corresponding part selection process information acquired from a plurality of external sources; and

generating a summary resulting from the mapping;

wherein for each of the component parts in the list, the corresponding part selection process information includes at least one of:

a lead time;

a current supply status;

at least one supply source;

a cost;

an end-of-life data; and

a preferredness rating.

2. The system of claim 1, further comprising at least one storage device in communication with the server, the at least one storage device housing:

a database of parts information.

3. The system of claim 2, wherein the at least one storage device further houses:

a database of procurement information relating to a review, approval, and purchase of bill of material components.

4. The system of claim 2, wherein the at least one storage device further houses:

a database of computer aided drafting information relating to product designs.

- 5. The system of claim 2, wherein the at least one storage device further houses:
  - a database of approved vendors lists.
- 6. The system of claim 2, wherein the at least one storage device further houses:

a database of bill of material files.

- 7. The system of claim 2, wherein said database of parts information is commercially provided by one of said plurality of external sources and is accessible to the server over the network.
- 8. The system of claim 3, wherein said database of procurement information is commercially provided by one of said plurality of external sources and is accessible to the server over the network.

- 9. The system of claim 4, wherein said database of computer aided drafting information is commercially provided by one of said plurality of external sources and is accessible to the server over the network.
  - 10. (Canceled)
- 11. The method of claim 34, further comprising modifying component parts data on said bill of material in response to reviewing said summary.
- 12. The method of claim 34, wherein the corresponding part selection process information further comprises:

an approved vendor list indicating approved sources of component supply for items on said bill of material; wherein the summary includes approved vendors operable for determining alternative sources of component supply.

- 13. The method of claim 12, further comprising modifying said bill of material based upon said approved vendors in said summary.
- 14. The method of claim 11, further comprising transferring a modified bill of material to relevant entities for review or approval.
- 15. The method of claim 14, further comprising modifying said bill of material based upon said review or said approval.
  - 16. (Canceled)

17. The method of claim 34, wherein said mapping each component part in the list is performed by:

importing component parts data listed on the bill of material to a bill of material assist application, the bill of material assist application including associated data fields for receiving the component parts data; and

importing the corresponding part selection process information to the bill of material assist application, the bill of material assist application including associated data fields for receiving the corresponding part selection process information.

- 18. The method of claim 34, wherein said importing said component parts data to said bill of material assist application is performed electronically whereby said component parts data is stored in a database.
  - 19. The method of claim 34, wherein said plurality of sources include:

at least one parts database;

at least one procurement database;

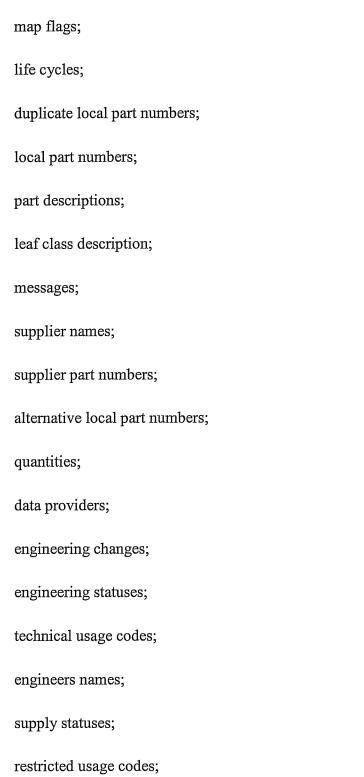
at least one computer aided drafting database;

at least one approved vendors database; and

external supplier databases.

20. (Canceled)

21. The method of claim 34, wherein the corresponding part selection process information further comprises data pertaining to:



end of life dates;

lead times;

part sourcing statuses;

reference designators;

commodities; and

comments desired by a system user.

- 22. (Canceled)
- 23. The storage medium of claim 35, further comprising instructions for causing the computer to implement:

modifying component parts data on said bill of material in response to reviewing said summary.

- 24. The storage medium of claim 35, wherein the corresponding part selection process information further comprises an approved vendor list indicating approved sources of component supply for items on said bill of material; wherein the summary includes approved vendors operable for determining alternative sources of component supply.
- 25. The storage medium of claim 24, further comprising instructions for causing the computer to implement:

modifying said bill of material based upon said approved vendors in said summary.

26. The storage medium of claim 23, further comprising instructions for causing the computer to implement:

transferring a modified bill of material to relevant entities for review or approval.

27. The storage medium of claim 26, further comprising instructions for causing the computer to implement:

modifying said bill of material based upon said review or said approval.

28. (Canceled)

29. The storage medium of claim 35, wherein said mapping each component part in the list is performed by:

importing component parts data listed on the bill of material to a bill of material assist application, the bill of material assist application including associated data fields for receiving the component parts data; and

importing the corresponding part selection process information to the bill of material assist application, the bill of material assist application including associated data fields for receiving the corresponding part selection process information.

- 30. The storage medium of claim 35, wherein said importing said component parts data to said bill of material assist application is performed electronically whereby said component parts data is stored in a database.
- 31. The storage medium of claim 35, wherein said plurality of sources include:

at least one parts database;

at least one procurement database;

at least one computer aided drafting database;

at least one approved vendors database; and

external supplier databases.

32. (Canceled)

33. The storage medium of claim 35, wherein the corresponding part selection process information further comprises data pertaining to:

map flags; life cycles; duplicate local part numbers; local part numbers; part descriptions; leaf class description; messages; supplier names; supplier part numbers; alternative local part numbers; quantities; data providers; engineering changes; engineering statuses; technical usage codes; engineers names; supply statuses; restricted usage codes;

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end of life dates;
lead times;
part sourcing statuses;
reference designators;
commodities; and
comments desired by a system user.
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34. A method for managing parts requirements processes in an engineering environment, comprising:

receiving a bill of material including a list of component parts in response to a product design conducted on a workstation, wherein the bill of material for the product design can be edited to facilitate production planning processes for at least one of developing or manufacturing the product design;

mapping each component part in the list to corresponding part selection process information, the corresponding part selection process information acquired from a plurality of external sources; and

generating a summary resulting from the mapping;

wherein for each of the component parts in the list, the corresponding part selection process information includes at least one of:

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a lead time;
a current supply status;
at least one supply source;
a cost;
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an end-of-life data; and

a preferredness rating.

35. A storage medium encoded with machine-readable program code for managing parts requirements processes in an engineering environment, the program code including instructions for causing a computer to implement a method, comprising:

receiving a bill of material including a list of component parts in response to a product design conducted on a workstation, wherein the bill of material for the product design can be edited to facilitate production planning processes for at least one of developing or manufacturing the product design;

mapping each component part in the list to corresponding part selection process information, the corresponding part selection process information acquired from a plurality of external sources; and

generating a summary resulting from the mapping;

wherein for each of the component parts in the list, the corresponding part selection process information includes at least one of:

a lead time;

a current supply status;

at least one supply source;

a cost;

an end-of-life data; and

a preferredness rating.

## EVIDENCE APPENDIX

None

# RELATED PROCEEDINGS APPENDIX

None